

## ABSTRACT

An apparatus, system or method enables microbubbles to be created on demand for use as the contrast agent within a contrast medium administrable to a patient for purposes of a medical procedure. The system comprises a reservoir, a pressurizing device, a microbubble generator, and a controller. The reservoir stores a liquid. The pressurizing device conveys the liquid, along with the medium formed therewith, through the system. The microbubble generator is used to create the microbubbles within the liquid to form the medium. The microbubble generator has an inlet for receiving the liquid and an outlet for communication of the medium to the patient. The controller controls the operation of the system so that the microbubbles created by the microbubble generator are generated according to the demands of the medical procedure and are administrable within the medium to the patient.